R E P O R T R E S U M E S

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STATE-WIDE COMPUTERIZED MODEL FOR DETERMINING OCCUPATIONAL OPPORTUNITIES IN NEBRASKA.

NEBRASKA RESEARCH COORDINATING UNIT, LINCOLN

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THE NEED FOR OCCUPATIONAL EDUCATION PROGRAMS WAS ASCERTAINED BY DESIGNING A MODEL FOR STATEWIDE ASSESSMENT OF EMPLOYMENT OPPORTUNITIES. A LIST OF 63,125 NEBRASKA EMPLOYERS WAS DEVELOPED IN COOPERATION WITH THE STATE TAX COMMISSIONER, INTERNAL REVENUE SERVICE, AND THE STATE DEPARTMENT OF LABOR. QUESTIONNAIRES CONSISTING OF 174 JOB CLUSTERS WERE MAILED TO A 3 PERCENT RANDOM SAMPLE OF 1,894 FIRMS TO DETERMINE THE NUMBER OF PEOPLE PRESENTLY EMPLOYED BY OCCUPATIONAL GROUPING, THE NUMBER OF EMPLOYEES NEEDED IN EACH OCCUPATIONAL GROUP DURING THE NEXT YEAR, AND THE EMPLOYMENT NEEDS FOR EACH OCCUPATIONAL GROUPING IN THE NEXT 3 YEARS. THE QUESTIONNAIRE YIELDED A 40 PERCENT RESPONSE AND DATA FROM NON-RESPONDENTS WERE OBTAINED BY PERSONAL INTERVIEW. SELF-EMPLOYED PERSONS HIRING NO EMPLOYEES WERE NOT INCLUDED IN THE SAMPLE POPULATION. HOWEVER, THE FARMER AND RANCHER GROUP WAS ESTIMATED FROM NEBRASKA AGRICULTURAL STATISTICS. THE EMPLOYMENT DATA WERE PROJECTED BY COMPUTER TO REFLECT STATEWIDE EMPLOYMENT OPPORTUNITIES IN EACH OF THE 174 JOB GROUPS. CURRENT EMPLOYMENT IN NEBRASKA WAS ESTIMATED TO BE 653,990 AND PERCENTAGE DISTRIBUTIONS BY OCCUPATIONAL GROUPS WERE--(1) AGRICULTURAL, 20.4, (2) DISTRIBUTIVE, 22.5, (3) HEALTH, 3.9, (4) WAGE EARNING HOME ECONOMICS, .8, (5) BUSINESS, 16.3, (6) TRADE AND INDUSTRIAL, 29.6, AND (7) OTHER, 6.5. FINDINGS INDICATED 42.8 PERCENT OF ALL NEW EMPLOYEES IN THE NEXT 3 YEARS WILL BE NEEDED IN THE TRADE AND INDUSTRIAL OCCUPATIONS AREA. FURTHER STUDY WAS RECOMMENDED TO DETERMINE JOB DESCRIPTIONS, CURRICULUM NEEDS, NET EMPLOYMENT OPPORTUNITIES (CORRECTED FOR MIGRATION), AND STARTING WAGES. (DM)

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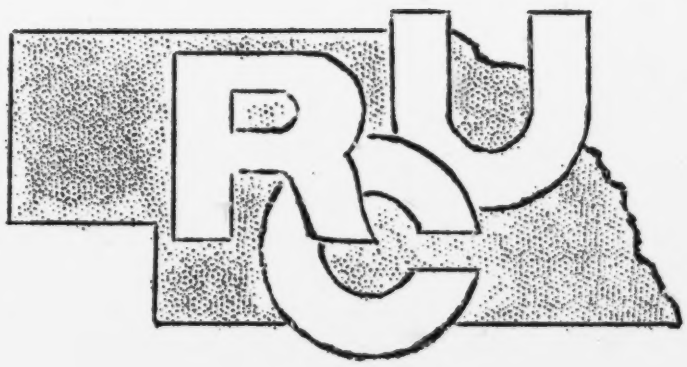
1968 Report

OCCUPATIONAL OPPORTUNITIES IN NEBRASKA



July, 1968

Nebraska Research Coordinating Unit
For
Vocational Education

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By

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NEBRASKA RESEARCH COORDINATING UNIT
FOR VOCATIONAL EDUCATION
University of Nebraska

STATE-WIDE COMPUTERIZED MODEL FOR DETERMINING OCCUPATIONAL OPPORTUNITIES IN NEBRASKA

SUMMARY

Introduction:

One of the most pressing problems confronting vocational educators, legislators and other policy makers in Nebraska is that of ascertaining the need for occupational education programs. Data on the state labor force have been collected under varying conditions, times and geographical areas. They have not adequately depicted the numbers and kinds of jobs which exist or which will exist in the future. Since vocational education programs should be geared to the labor market, the need for a reliable indicator of employment opportunities is apparent. The Nebraska Research Coordinating Unit (RCU) designed a model to obtain, from employers themselves, current and projected data on employment opportunities.

Objective:

The objective of the research was to design a model for state-wide assessment of employment opportunities.

Procedure:

The first step was to identify a complete list of firms within the state that employed people.

The population of Nebraska employers was developed in cooperation with the State Tax Commissioner, the Internal Revenue Service (IRS) and the State Department of Labor. The population included all businesses required to file Federal Income Tax Reports in the following tax classes: (1) firms employing one or more persons on which Social Security was paid and income tax withheld, (2) domestic help and (3) farms and ranches employing farm labor. In addition (4) all Federal offices in Nebraska and (5) out-of-state Nebraska employers were included.

The population of firms was 63,125. Names of all firms were transferred to magnetic tape and assigned consecutive numbers. A three per cent sample, 1894 firms, was randomly selected by computer from this population. Names and addresses of the firms were obtained from the computer printout. A questionnaire mailed to the 1894 firms yielded a 40 per cent response. Data from the remaining firms were obtained by personal interview.

It would be obviously impractical to enumerate employment opportunities for every job title. The Standard Terminology For Instruction in Local and State School Systems was used to identify job clusters or groupings of job titles according to similar educational preparation.[1] The two-page questionnarie consisted of 174 job clusters in seven occupational areas, (i.e. Agriculture, Distribution, Health, Wage Earning Home Economics, Business, and Trade and Industrial Occupations, and other).

Data requested from all firms were: (1) the number of people presently employed by occupational grouping; (2) the employer's estimate of the number of employees needed in each occupational group during the next year due to turnover, promotion, expansion and retirement; and (3) the employer's estimate of employment needs for each occupational grouping in the next three years.

Delimitations:

The population did not include self-employed persons who hired no employees and withheld no labor income tax or social security. No accurate source of this information is available except the farmer and rancher group, which could be estimated from the Nebraska Agricultural Statistics.[2]

Findings:

The employment data collected were projected by computer to reflect state-wide employment opportunities estimates for each of the 174 job groups. Current employment in Nebraska was estimated to be 653,990. This total includes an estimated 61,852 self-employed farmers and ranchers who did not appear on the IRS File because they did not employ hired labor. The 61,852 figure was obtained by subtracting the number of projected farmers and ranchers reporting in the study (18,148) from the projected number of Nebraska farms and ranches reported in the Nebraska Agricultural Statistics.[2]

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[1]Putnam, John F. and Chismore, Dale W. Standard Terminology for Instruction in Local and State School Systems. State Education Records and Reports Series: Handbook VI, Chapter 5, U. S. Department of Health, Education, and Welfare, Office of Education, May 1967.

[2]Nebraska Department of Agriculture. Nebraska Agricultural Statistics. Annual Report, 1965, Preliminary 1966, State-Federal Division of Agricultural Statistics, Lincoln, Nebraska, May 1967, p. 109.

List 1 shows the occupational mix of present Nebraska employment based on the educational classifications in the Standard Terminology for Instruction in Local and State School Systems.[3] These educational job clusters are grouped according to occupations which require similar background and preparation.

Nebraska State Department of Labor "Labor Force Summary"[4] (List 2) for the same time period classifies Nebraska jobs by Industrial Classification based upon product produced and general service performed. Since the basis for categorization is different, the data in most cases are not comparable.

List 1 Standard Terminology for Instruction in Local and State School Systems[3]		List 2 Labor Force Summary of Nebraska's Employment[4]	
Agricultural	133,452*	Agricultural	94,000*
Distributive	147,066	Trade, Service & Transportation	253,800
Health	25,435	(Included under services, Gov't. and Trades)	
Wage Earning Home Ec.	5,501	(Included under services)	
Business Occupations	106,367	(Included in all segments)	
Trade & Industrial	193,403	(Manufacturing, Mining & Const.)	105,500
Government (Inc. under Distr., Office and Professional)		Government	94,500
Unemployed (Not identified)		Unemployed	13,400
Other Occupations	42,766	Other Non-Agr. Employment	63,100
Total	653,990	Total	624,300

* Includes on-farm and off-farm agricultural occupations

* On-farm only

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[3]Putnam and Chismore loc. cit.

[4]Nebraska Department of Labor, Division of Employment. "Nebraska Labor Force Summary," Nebraska Labor Force Trends, December, 1967, Lincoln, Nebraska

TABLE I

NUMBERS AND PERCENTAGES OF PERSONS PRESENTLY EMPLOYED IN NEBRASKA BY OCCUPATIONAL AREA[5]

	Present Employment	
	Number	Percent of Total
Agricultural Occupations	133,452	20.4
Distributive Occupations	147,066	22.5
Health Occupations	25,435	3.9
Wage Earning Home Economics Occupations	5,501	.8
Business Occupations	106,367	16.3
Trade and Industrial Occupations	193,403	29.6
Other Occupations	42,766	6.5
TOTAL	653,990	100.0

[5]Putnam and Chismore loc. cit.

NOTE: Persons enrolled in vocational education programs to prepare for jobs may receive instruction in two or more subject areas, depending on the specific functions of their job. For example, persons reported in "Home Furnishings, Apparel and Accessories" under Distributive Occupations, and "Hospital Food Services, Hospital Food Assemblers" under Health Occupations would need instruction and technical knowledge in Home Economics.

As shown in Table II the estimated Nebraska man power need for one and three years indicates the highest need for trained workers will be in the Trades and Industrial Occupations area, where 29.6 per cent of the present labor force is employed. The need for new workers for the next 12 months (also shown in Table II) indicates that 42.3 percent of the new workers needed will be in the Trades and Industrial Occupations area. The study revealed that employers estimate there will be 142,899 job opportunities in Nebraska in the next year, and that there will be a total of 294,768 job opportunities in Nebraska in the next three years.

TABLE II

NUMBERS AND PERCENTAGES OF OCCUPATIONAL OPPORTUNITIES IN NEBRASKA IN THE NEXT ONE AND THREE YEARS BY OCCUPATIONAL AREA[6]

	New Employees Needed in 12 Months		New Employees Needed in 3 Years	
	Number	Percent of Total	Number	Percent of Total
Agricultural Occupations**	17,433	12.2	27,001	9.1
Distributive Occupations	31,966	22.4	76,067	25.8
Health Occupations	7,997	5.6	11,266	3.8
Wage Earning Home Economics Occupations	1,066	.7	1,567	.5
Business Occupations	17,402	12.2	39,032	13.2
Trade and Industrial Occupations	60,469	42.3	125,435	42.8
Other Occupations	6,566	4.6	14,400	4.8
TOTAL	142,899	100.0	294,768	100.0

[6]Putnam and Chismore loc. cit.

**There is no projection for these cells from the 61,852 self-employed farmers and ranchers hiring no employees.

NOTE: Persons enrolled in vocational education programs to prepare for jobs may receive instruction in two or more subject areas, depending on the specific functions of their job. For example, persons reported in "Home Furnishings, Apparel and Accessories" under Distributive Occupations, and "Hospital Food Services, Hospital Food Assemblers" under Health Occupations would need instruction and technical knowledge in Home Economics.

AGRICULTURAL OCCUPATIONS:

Much has been written about the shift of employment in Agriculture. People in off-farm agricultural occupations (agricultural mechanics, horticulture and agricultural supply and services) have expressed need for trained workers, but the number of persons needed and the numbers currently employed have not been previously established. The one and three year projections in this study provide reasonable estimates. The opportunities depicted in production and off-farm agricultural jobs warrant expansion of agricultural education programs in Nebraska.

Table III shows 133,452 currently employed in agricultural occupations, with 17,433 job opportunities in the next year and 27,001 opportunities in the next three years. The opportunities in the next one year constitute 12.2 per cent of the state's employment opportunities by occupational area.

TABLE III

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN AGRICULTURAL OCCUPATIONS

OCCUPATIONAL AREA		Now Employed		Future Needs Due To Turnover & Expansion			
				Next 12 Months		Next 3 Years	
		f*	No.	f*	No.	f*	No.
Professional & Managerial. . .	1	133	8133	13	733	28	2067
Farming and Ranching	2	545	31900	168	9800	168	11467
Agricultural Supplies (Pro-	2a		61852**				
cessing Marketing & Services)	3	49	5500	17	2800	25	4100
Agricultural Mechanics (Operations, Sales, and Services) .	4	27	2433	10	500	12	667
Agriculture Products Processing (Marketing, Inspection & Services)	5	37	19767	14	1767	15	5700
Ornamental Horticulture Production, Processing, Marketing & Services)	6	17	1000	9	567	6	567
Agriculture Resources (Conservation, Utilization and Services)	7	5	300	2	100	2	100
Forestry (Production, Pro- . . cessing, Marketing and Ser- . vices).	8	0	0	1	33	1	33
Laborers	9	15	1600	8	567	7	867
Farm Loan Officers	10	3	767	2	533	2	1300
Stable & Kennel Workers. . . .	12	2	100	1	33	1	33
Veterinary Assistants.	13	3	100	0	0	3	100
TOTAL		836	133452**	245	17433	270	27001

*Number of employers reporting employees in this category.
**From 1966 Agricultural Statistics, 61,852 farmers not in sample because they do not hire help.

The numbers employed under Farming and Ranching in Table III included hired labor and replacement farmers while the project in the same table for "Laborers" includes the group of untrained people in the off-farm agricultural businesses.

All part-time workers were converted to full-time equivalents. Seasonal fluctuation, common in agriculture, was not considered.

The majority of the workers in agricultural occupations are at less than the professional level, requiring varying levels of education. About 11 per cent of those now employed and about four per cent of the next year's need (733) were classified in the professional category.

A study of Genereux[7] showed the annual need for replacement farmers in Nebraska to be 951 annually. Genereux's study made allowances for farm consolidation, turnover, age of operator and population trends.

DISTRIBUTIVE OCCUPATIONS:

Distributive Occupations include people in business, advertising, sales, merchandising, and distribution. As shown in Table IV the total figure of 147,066 persons now employed constitutes about 22.5 per cent of the work force in Nebraska. The 31,966 opportunities identified for next year account for about 22.4 per cent of the total anticipated need. In three years the 76,067 anticipated opportunities will be 25.8 per cent of employment needs. About 10 per cent of those currently employed in this group are listed as professional and managerial while only 5.3 per cent of those needed next year are in this category. This is probably because the turnover at the professional and managerial level is not as rapid as in other positions.

Positions in sales account for the highest number of occupational opportunities in this employment area. The retail opportunities alone account for about 18,400 or 57 per cent of all opportunities. The figure obtained for "Transportation" includes all truck drivers.

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[7]Genereux, Douglas. Annual Estimated Replacement Farmer Opportunities in Nebraska, Departmental Report No. 3, Dept. of Ag. Education, Univ. of Nebr., Lincoln, Nebr., March 1967.

TABLE IV

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES
IN DISTRIBUTIVE OCCUPATIONS

OCCUPATIONAL AREA		Now Employed		Future Needs Due to Turnover & Expansion			
				Next 12 Months		Next 3 Years	
		f*	No.	f*	No.	f*	No.
Professional & Managerial	1	190	14,933	18	1,700	28	3,467
Advertising Services. . . .	2	11	867	4	200	5	467
Apparel and Accessories . .	3	31	11,233	15	2,767	16	8,167
Automotive and Petroleum. .	4	31	10,967	10	1,967	13	4,733
Finance and Credit.	5	16	5,167	5	1,500	6	4,067
Food Distribution	6	38	27,867	14	3,567	20	9,833
General Merchandise	7	23	19,733	11	4,600	12	12,667
Hardware, Building Materials.	8	27	5,533	8	1,233	6	2,800
Home Furnishings.	9	13	4,900	4	833	7	3,767
Hotel and Lodging	10	14	2,533	3	233	5	633
Insurance	11	28	2,433	9	533	12	900
Marketing	12	7	567	1	67	2	167
Real Estate	13	30	2,667	7	400	12	933
Retailing (General/ Miscellaneous)	14	63	9,500	25	3,433	25	5,633
Transportation.	15	63	9,833	31	2,800	30	5,000
Wholesaling (General/ Miscellaneous)	16	37	4,267	14	933	16	1,700
Shipping and Stock Clerks	17	19	12,733	7	5,200	12	11,100
Sales Engineers	18	1	233	0	0	0	0
Postal Carrier.	19	6	767	0	0	1	33
Postal Clerk.	20	4	333	0	0	0	0
TOTAL		652	147,066	186	31,966	228	76,067

*Number of employers reporting employees in this category.

HEALTH OCCUPATIONS:

Health Occupations include persons who utilize skills, abilities and understandings deemed necessary to render supportive services to the health professions. The latter are concerned with providing diagnostic, therapeutic, preventive, restorative and rehabilitative health care services.

Table V indicates that 25,435 persons are presently engaged in health occupations, with 7,997 occupational opportunities in the next 12 months and 11,266 opportunities in three years.

TABLE V

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN HEALTH OCCUPATIONS

OCCUPATIONAL AREA		Now Employed		Future Needs Due to Turnover & Expansion			
				Next 12 Months		Next 3 Years	
		f*	No.	f*	No.	f*	No.
Professional & Managerial. . .	1	56	9,933	7	2,233	9	2,200
Dental Services							
Assistant (Dental)	2	10	467	3	100	5	300
Hygienist (Associate Degree)	3	1	33	1	33	1	67
Laboratory Technician. . . .	4	2	67	1	33	1	33
Medical Services							
Medical Assistants	5	9	400	2	67	3	167
Cytology Technician.	8	0	0	1	33	1	67
Histology Technician	9	3	167	1	33	2	100
Medical Laboratory Ass't..	.10	5	600	3	333	4	600
Nurse, Associate Degree. .	.11	14	900	3	333	5	633
Practical (Vocational) Nurse	.12	12	1,767	4	900	7	1,733
Nurses' Aide	.13	11	8,467	6	2,833	5	3,500
Hospital Food Services Supervisor.	.14	1	67	1	67	1	133
Inhalation Therapy Techn..	.15	1	100	1	33	1	100
Medical X-ray Technician .	.16	3	367	1	133	3	333
Optician	.17	3	267	0	0	1	33
Surgical Technician. . . .	.18	1	300	1	200	1	233
Occupational Therapy Assistant	.19	0	0	1	33	1	67
Physical Therapy Assistant	.20	1	33	1	33	1	67
General Medical Technology	.22	1	67	1	67	1	67
Hospital Food Assemblers .	.23	1	1,433	1	500	1	833
TOTAL-		135	25,435	40	7,997	54	11,266

*Number of employers reporting employees in this category.

The per cent breakdown of those employed in each job group was Professional and Administrative categories, 39.0 per cent, Nurses Aides 33 per cent, Licensed Practical Nurse 7 per cent, Hospital Food Assemblers 5.6 per cent, Associate Degree Nurse 3.5 per cent, Clinical Laboratory Assistants 2.4 per cent, Certified Dental Assistants 2.2 per cent and Medical Assistants 1.5 per cent. Other occupations having 1 per cent or less representation are: Associate Degree Hygienist, Dental Laboratory Technician, Cytology Technician, Histology Technician, Hospital Food Services Supervisor, Inhalation Therapy Technician, Optician, Surgical Technician, Occupational Therapy Assistant, Physical Therapy Assistant, "General Medical Technology". and EGK Technician.

It is estimated that the projections for the section are probably conservative because Health Occupations was new with the Vocational Act of 1963 and The Standard Terminology for Instruction in Local and State School Systems provided a limited list of occupations.

HOME ECONOMICS OCCUPATIONS:

Wage earning home economics occupations include those occupational opportunities related to: care and guidance of children; clothing management, production, and services; food management, production, and services; home furnishings, equipment, and services; institutional and home management and supporting services. As shown in Table VI, the total number of persons employed in home economics related occupations in Nebraska is an estimated 5,501 with 1,066 employment opportunities expected in the next year and 1,567 in the next three years.

Prior to the passage of the Vocational Education Act of 1963 many of the food services and production, clothing services and production, and some retail jobs were and still are included in the areas of Trades and Industry and Distribution.

TABLE VI

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN WAGE EARNING HOME ECONOMICS OCCUPATIONS

OCCUPATIONAL AREA		Now Employed		Future Needs Due to Turnover & Expansion			
				Next 12 Months		Next 3 Years	
		f*	No.	f*	No.	f*	No.
Professional & Managerial. . .	1	10	467	1	33	2	67
Care & Guidance of Children. .	2	6	200	1	33	1	33
Home Furnishings, Equipment & Service.	3	4	167	2	67	2	67
Institutional and Home Management & Supporting Services	4	11	867	3	267	6	533
Domestic**	5	56	2,200	6	233	7	267
Tailoring & Sewing Machine Operator	6	9	933	7	333	6	433
Hostess.	7	5	667	2	100	2	167
TOTAL***		101	5,501	22	1,066	26	1,567

*Number of employers reporting employees in this category

**It should be noted that it was difficult to record the total number of hours of employment for each domestic, as a domestic employee may work only one day (or part of one day) per week for an employer.

***The major food preparation and serving areas involving Wage Earning Home Economics knowledges and skills are shown in Table VIII Trade & Industrial lines 45-47 according to the Standard Terminology for Instruction in Local and State School Systems and should be given consideration in this area.

Seventeen per cent of the home economics employment is in the area of tailoring and sewing machine operation with almost fifty per cent more needed in that area in the next three years.

The data show that child care occupations included 200 employees or 3.6 per cent of home economics employment. This seems low when it is considered that according to the 1960 census Nebraska had 22,268 working mothers with children under six years of age. The census data included all persons 14 years of age or older, and it is probable that many persons who were employed as part time baby sitters and as domestic help (where no social security or income tax was withheld) were not included in the population from which this sample was taken. Only six people with the primary function of child care were included in the sample.

Since wage earning home economics occupations is a new category, perhaps some difficulty was experienced by employers in grouping such employees into occupational clusters. Conventionally they expect occupations in this area to be listed under other categories. The 933 bakers, 11,933 cooks and chefs, and the 15,300 waiters and waitresses employed in Nebraska according to Table VIII, comprise a large segment of occupations that require home economics skills yet have skills related to the Trades and Industrial area. The projections for clothing related occupations are conservative for the state-wide totals due to a limited listing of this occupational classification on the data gathering instrument.

BUSINESS OCCUPATIONS:

Business and related occupations include those which utilize skills pertaining to business and office functions, and represent one of the high opportunity areas. A characteristic of this group, as reflected in this study, is the high rate of turnover.

The total number of people employed in an office or related occupation is estimated at 106,367 with 17,402 employment opportunities expected next year and 39,032 within the next three years. The 106,367 existing positions account for 16.3 per cent of the employment in the state.

About 21.2 per cent of those employed in this group are listed as professional and managerial people. Stenographic, secretarial, and related occupations make up the next largest percentage in the office and related occupations category comprising 19.9 per cent of the total number. The area of filing, office machines, and general office clerical follows closely with employees in this group comprising 18.5 per cent of the total number. In addition, 13.3 per cent of the total number are listed in the accounting and computing areas.

The greatest need in the next year is expected in stenographic, secretarial, and related with a 22.2 per cent expected increase in opportunities. Filing, office machines and general office and clerical will constitute an 18.2 per cent increase while the professional and managerial category will account for 15.9 per cent of the future employment opportunities.

TABLE VII

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN BUSINESS OCCUPATIONS

OCCUPATIONAL AREA		Now Employed		Future Needs Due to Turnover & Expansion			
				Next 12 Months		Next 3 Years	
		f*	No.	f*	No.	f*	No.
Professional & Managerial. . .	1	120	22,500	22	2,767	35	4,867
Accounting and Computing . . .	2	98	14,200	29	2,167	42	6,333
Business Data Processing Systems.	3	21	3,000	9	367	15	1,033
Filing, Office Machines and General Office Clerical. . .	4	139	19,633	49	3,167	64	7,400
Information Communication. . .	5	15	2,133	4	467	6	1,033
Materials Support, Transporting storage and recording. . . .	6	7	1,500	3	300	4	500
Personnel Training & Related .	7	15	1,867	4	333	7	1000
Stenographic, Secretarial and Related.	8	167	21,100	51	3,867	79	8,367
Typing and Related	9	44	4,767	24	1,467	33	2,933
General Office Training. . . .	10	77	11,333	19	2,100	31	4,667
Cashiers, Receptionist & Switch-board.	11	10	1,067	3	133	3	233
Tellers & Interviewers	12	7	3,000	3	267	3	633
Law Clerk/Secretary.	13	5	267	0	0	1	33
TOTAL		725	106,367	220	17,402	323	39,032

*Number of employers reporting employees in this category.

TRADES AND INDUSTRIAL OCCUPATIONS:

As shown in Table VIII 193,403 persons are currently employed in Trades and Industrial Occupations. This is 29.6 per cent of the total projected Nebraska current employment. Professional and managerial occupations account for 6 per cent of the "Trades and Industrial" group, while "unskilled" jobs account for about 11 per cent of the Trades and Industrial total.

The data indicate there will be 60,469 employment opportunities in the next year and 125,435 within the next three years. These opportunities represent 42.3 and 42.8 per cent respectively of the total employment opportunities in Nebraska during the three year period.

Many of the occupations in the Trades and Industrial occupational area are highly specialized, and therefore, difficult to group successfully. Table VIII depicts the job groups on which data were obtained. It should be noted that the data were obtained at a peak employment in the construction season.

TABLE VIII

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN TRADES AND INDUSTRY

OCCUPATIONAL AREA		No. Employed		Future Needs Due To Turnover & Expansion			
				Next 12 Months		Next 3 Years	
		f*	No.	f*	No.	f*	No.
Professional & Managerial. . .	1	114	12,833	9	1,000	12	2,067
Air Concitioning							
Cooling.	2	4	600	2	167	2	400
Heating.	3	5	667	2	167	3	433
General.	4	2	3,333	1	33	2	133
Appliance Repair	6	6	3,067	5	900	5	1,633
Architectural Engineering							
Technician	7	3	600	3	167	3	300
Automotive							
Body and Fender.	8	13	1,667	8	467	7	533
Mechanic	9	49	6,133	20	1,733	25	2,833
Service Station.	10	65	8,267	32	3,033	32	4,600
Automotive Specialists Air Conditioning, Brakes							
Tires.	11	5	4,000	2	2,700	2	6,733
Aviation							
Ground Operations.	13	0	0	1	67	1	67
Pilots	14	2	267	2	67	3	100
Weather Observers.	15	2	100	0	0	1	33
Business Machine Maintenance	16	3	167	0	0	2	67
Chemical Technician.	17	2	533	1	133	1	333
Civil Engineering Technician	18	7	1,300	6	433	7	867
Commercial Art	19	1	67	0	0	0	0
Commercial Photography . . .	20	3	267	1	33	1	33
Construction and Maintenance							
Carpentry.	21	39	9,900	19	4,167	24	11,767
Masonry cement work & tile	22	25	5,600	9	1,567	11	5,000
Electricity.	23	8	1,667	6	500	6	1,167
Painting & decorating. . .	24	10	1,567	6	767	6	1,633
Plumbing & pipe fitting. .	25	13	1,767	2	167	3	400
Construction Inspectors. .	26	3	100	0	0	1	33
Laborers	27	16	6,033	13	9,000	14	19,100
Lathers.	82	1	100	1	267	1	467
Floor & wall covering. . .	86	2	167	1	133	1	200
Roofers.	87	4	800	2	233	2	300
Custodian Services	28	137	11,500	31	1,867	54	4,400
Diesel Mechanic.	29	8	733	7	600	7	867
Drafting	30	7	1,433	5	500	6	1,233
Electrical							
Industrial Electrician . .	31	3	867	2	200	2	533
Lineman.	32	1	500	1	233	1	600
Motor Repairman.	33	2	4,200	1	333	1	833
Electrical Manufacturing .	34	1	1,667	1	667	1	833
Electronics							
Communications	36	7	367	1	33	3	167

TABLE VIII (Cont'd.)	Now Employed		Future Needs Due To Turnover & Expansion			
			Next 12 Months		Next 3 Years	
	f*	No.	f*	No.	f*	No.
Radio/Television 37	6	1,467	2	700	3	1,767
Electrical Technician. 38	1	67	0	0	0	0
Electro-Mechanical Technician.40	4	700	2	167	3	333
Fabric Maintenance						
Dry Cleaning 41	9	4,033	4	3,633	4	5,167
Laundry. 42	20	4,000	7	2,233	9	6,300
Food and Related Occupations						
Baker. 45	11	933	5	233	7	433
Cook/Chef. 46	96	11,933	26	1,900	36	3,700
Waiter/waitress. 47	72	15,300	28	4,967	37	8,633
Bartender. 48	37	3,433	9	867	11	1,700
Dish washer & bus boys . . .49	28	5,667	10	1,167	14	2,533
Graphic Arts 50	11	1,567	3	233	7	633
Industrial Engineering						
Technician 51	1	33	1	33	1	67
Instrument Maintenance and						
Repair 52	3	133	0	0	0	0
Mechanical Engineering						
Technician 54	4	567	3	100	4	333
Metalworking						
Foundry. 55	1	3,333	1	4,000	1	8,000
Machine shop 56	7	2,833	5	967	5	1,900
Sheet metal. 57	3	133	0	0	0	0
Welding. 58	13	2,367	6	1,033	6	2,467
Machine Operators. 59	6	5,067	2	300	3	967
Tool & Die Worker. 60	1	200	0	0	0	0
Personal Services						
Barbering. 63	15	700	2	67	5	167
Cosmetology. 64	23	1,100	4	133	7	300
Recreation & health. 65	11	1,300	3	367	4	567
Petroleum technician 67	3	200	0	0	0	0
Public Service						
Law Enforcement. 70	17	3,933	4	167	9	1,067
Guards 71	4	1,167	3	400	3	400
Treatment plant operators. .72	2	100	0	0	0	0
Refrigeration. 73	2	167	2	67	2	100
Small Engine Repair (internal						
combustion). 75	2	67	2	67	2	67
Stationary Energy Sources						
Electric Power and						
Generating Plants. 76	3	300	0	0	1	33

TABLE VIII (Cont'd.)	Now Employed		Future Needs Due to Turnover & Expansion			
			Next 12 Months		Next 3 Years	
	f*	No.	f*	No.	f*	No.
General. 78	2	167	0	0	0	0
Upholstering 80	1	167	1	167	1	167
Woodwork						
Millwork and Cabinet Making.81	8	1,033	8	867	7	1,167
Other Trades and Industries						
Heavy equipment & road Maintenance. 90	27	13,500	9	1,467	16	3,167
Iron workers 91	2	1,767	1	133	1	267
General repair & vending service. 84	7	833	2	133	2	167
Bus drivers. 85	8	1,500	1	33	2	67
Pest control 88	1	100	1	167	1	167
Plant maintenance & men. . .92	11	2,767	5	367	4	500
Oil drillers 93	1	100	1	33	0	0
Well drillers. 94	2	167	0	0	0	0
Heavy equipment mechanic . .95	3	233	0	0	0	0
Glass workers. 96	1	667	0	0	0	0
Butchers 97	6	1,033	2	100	2	167
Unskilled workers. 98	17	3,233	7	867	7	1,267
Foreman. 99	5	500	0	0	0	0
TOTAL	109	193,403	375	60,469	480	125,435

*Number of employers reporting employees in this category.

OTHER OCCUPATIONS:

This occupational category was included to enable employers to report employees that did not logically fit into one of the previous six groups. The majority of the persons reported in the professional and managerial group were teachers, ministers, lawyers and other professionals not logically fitting in the professional category of other occupational groups. It is an important segment.

The 34,600 persons in the professional and managerial group reported in Table IX, when combined with those in the professional and managerial from the other six groups, totaled about 18 per cent of the Nebraska Labor Force.

The total representing the unskilled labor force was estimated at about 4 per cent in Nebraska.

TABLE IX

CURRENT AND PROJECTED EMPLOYMENT OPPORTUNITIES IN OTHER OCCUPATIONS

OCCUPATIONAL AREA	Now Employed		Future Needs Due To Turnover & Expansion			
			Next 12 Months		Next 3 Years	
	f*	No.	f*	No.	f*	No.
Professional & Managerial. . . 1	130	34,600	35	5,333	45	11,000
Production or assembly worker with no previous training needed 2	12	8,133	6	1,233	6	3,400
Teacher Aids 17	1	33	0	0	0	0
TOTAL	143	42,766	41	6,566	51	14,400

*Number of employers reporting employees in this category.

Need for Further Study:

The objective of this study was to assess current employment and categorize employment opportunities in Nebraska for the next year and three years. The specific jobs and technical functions of each job must be determined through further in-depth studies within the occupational areas where employment opportunities exist.

It is probable that educational programs preparing persons for many of the opportunity areas will cut across two or more subject areas, based on the function of the specific job. It is possible that persons in several job titles may be enrolled in certain common courses as well as specific courses related to each job title. Only more detailed studies will uncover exact curriculum needs.

Additional research is also needed in order to determine the "net" employment opportunities. The study included an assessment of employment opportunities created by expansion, turnover, promotion, and retirement. More detailed study is needed in occupational areas where there is high employment opportunity to determine the inter- and intra-firm migration. Such a study should also provide clues to the need for "upgrading education" by workers who are migrating.

Further study is also needed to ascertain approximate starting wages for jobs where employment opportunities exist.